Biasing Tutorial
Please read before proceeding . . .

Everytime you have to change your power tubes, your amp needs to be rebiased (the idle current). The newer Einstein and Herbert models have external bias test points, all you need is a digital multimeter which can read milli amperes. Biasing is done on the amp's plates, pairwise by bridging a fuse.
VH4 amplifiers also can be biased on their plates - the whole quartet (VH4) or the two duets (VH4S).
Our suggestion for all users who are not familiar to handle a digital multimeter or should be scared by the 500 Volts inside an amp, should use a tool like Ted Webers "Bias Rite" adaptor.
www.tedweber.com
Feel free to ask any questions.
Diezel's suggestions for pairwise plate biasing are (Einstein, Herbert):
5881: 50 mA
6L6: 60 to 70 mA
EL34 60 to 70 mA
6550, KT66, KT88: 80 mA

Einstein/newer Herbert Biasing (See page 2 for older model Herbert Biasing <#300)

Since Einstein (Herberts notes in brackets) has external bias points and its trimmer is accessible from the top, it is much easier and user-friendly . . . .

1) Remove the back panel. You'll see three (four) jacks above the fuses.

2) Set your multimeter to mA and plug your black probe into the black jack and the red to one of the red jacks.

3) Remove the jack-corresponding fuse from the fuse holder which is located on the backplate, turn volume controls to 0 and make sure a load or speaker is connected to the amp.

4) Now switch it on and read the bias current from your multimeter. Adjust it to the proper value by turning the bias pot which is accessible with a little flat head screwdriver through the hole in front of the red jack.

5) When finished, turn off the amp, install the fuse and repeat the same steps for the other pair(s) by using the other red jack(s) and removing the other fuse(s).

Herbert Biasing Tutorial (<#300)

1) Take Herbie out of the head shell, place the transformers on two books (tubes !) with the pots facing you

2) upper right side: three fuses - from the left A, B, C

3) mid-left: three pots from the top: TrimA, TrimB, TrimC

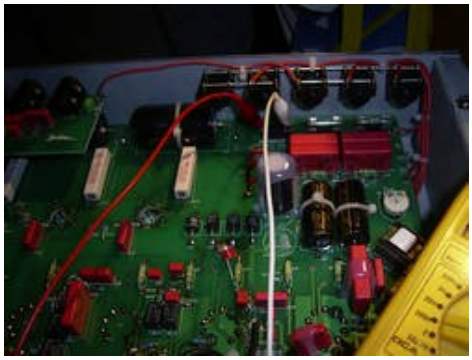
corresponding pairs:

A = 3 + 4 (inner pair)
B = 2 + 5 (inbetweens)
C = 1 + 6 (outer pair)

4) gently push the first fuse out of its socket

5) install croco leads and hook them to your DMM, set to 200mA (!) DC (!)

6) now (not earlier!) hook to mains + cab, vol = 0 and switch on (both, power and standby)



7) read DMM until value doesn't change any more (1 minute, new tubes may take longer)

8) adjust trimmer until you get the current given in the table bottom of post
clockwise: increasing current
counter clockwise: decreasing current

9) switch Herbert off and unhook from mains

10) reinstall fuse you took out

11) repeat for the three pairs/fuses/trimmers